

**ENVIRONMENTAL ASSESSMENT
NO. AZ -420-2005-008**

**REDEVELOPMENT OF
WEST SILVER BELL MOUNTAINS CATCHMENT #3 (AGFD #880)
IN THE IRONWOOD FOREST NATIONAL MONUMENT**

PREPARED BY

ARIZONA GAME AND FISH DEPARTMENT
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and

BUREAU OF LAND MANAGEMENT
Tucson Field Office
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January, 2004

Decision:

The Arizona Game and Fish Department (AGFD), in cooperation with the Bureau of Land Management, will redevelop West Silver Bell Mountains Catchment #3 (#880), as described in the proposed action. The existing catchment components will be replaced within the existing exclosure fence with buried water storage tanks, a drinking trough set at ground level, a low-profile water collection dam, and a pipe-rail fence. The proposed action will not have direct or indirect adverse impacts on energy development, production, supply and/or distribution.

Finding of No Significant Impacts:

Based on the information contained in the attached Environmental Assessment, it is my determination that the proposed action is not a major Federal Action and will have no significant effect on the quality of the human environment; therefore, an Environmental Impact Statement is not required.

Rationale for Decision:

Redevelopment of this water catchment will result in a safer, more reliable, perennial source of water for wildlife utilizing this area, as well as a reduction in water hauling and other vehicle use in the Ironwood Forest National Monument. Construction techniques will be utilized to make the catchment greatly less obtrusive to monument visitors. Alternatives A and B have similar benefits, however the visual profile would not be reduced to the extent of that under the Proposed Action. In addition, Alternative B would be less likely to be self-sufficient, should the apron-only system fail to gather sufficient water during a given period of below-normal rainfall.

STIPULATIONS:

1. All camping associated with the project will occur within 100 feet of established roads and trails, within a general area identified by BLM personnel. All project participants will follow common "leave no trace" camping ethics regarding garbage, human waste disposal and the removal of vehicle tracks.
2. Firewood will not be taken from the monument, but will be brought in from outside. All fire rings will be scattered following disbandment of camping activities. Any extra campfire wood will be removed from the monument.
3. All old water development components and construction debris will be promptly removed from the area and disposed of properly. Any soil or rock excavated during redevelopment of the catchment will be used for backfill or spread in the immediate vicinity. Disturbed areas will be contoured to blend in with the surrounding area.
4. Disturbance to native vegetation will be kept to a minimum and in accordance with the Arizona Native Plant statutes. Where practical, native vegetation will be replanted in disturbed areas to enhance natural revegetation, and the remaining disturbed areas will be harrowed to approximately a 4" depth to prevent erosion and promote natural vegetation regeneration by seed.
5. Aboveground structures will be camouflaged (e.g. painted/tinted or covered with native rocks, concrete, organic debris, or soil) to make them as unobtrusive as possible. The pipe-rail fence will be allowed to rust naturally, and right angle corners in the fence line will be rounded to further blend in with the natural features.
6. If desert tortoises are encountered within the project area, workers will follow AGFD protocol to move them from the project site and out of harm's way.

7. Should any archaeological artifacts be found during the redevelopment, the Tucson Field Office archaeologist will be notified immediately. All work will cease until an evaluation of the discovery is made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values.

Shela McFarlin
Field Manager

Date

Finding of No Significant Impact

For the Redevelopment of West Silver Bell Mountains Catchment #3 (#880)
In the Ironwood Forest National Monument
EA AZ-420-2005-008

The Bureau of Land Management, Tucson Field Office, has analyzed a proposal by the Arizona Game and Fish Department (AGFD) to redevelop an existing wildlife water development, West Silver Bell Mountains Catchment #3 (#880), in the Ironwood Forest National Monument (IFNM). The proposed action and alternatives and any potential mitigation measures are described in the attached Environmental Assessment (EA AZ-420-2005-008)

This catchment was originally constructed in March 1983, as a component of the Silver Bell-Baboquivari Habitat Management Plan (HMP), and prior to the designation of the IFNM. Site-specific environmental evaluation of the original construction was included in the Environmental Assessment prepared for the HMP (AZ-020-0-197).

The AGFD has maintained perennial availability of water for wildlife at this development since it was constructed. This included routine maintenance and the hauling of supplemental water, when necessary. The proposed action is to replace the existing, aging components of the catchment with more modern, less visible, and more reliable components within the existing enclosure fence.

The AGFD and the Bureau of Land Management, Tucson Field Office, cooperate under a Master Memorandum of Understanding (2004).

Related Environmental Documents

- Silver Bell Management Framework Plan (1976)
- Silver Bell – Baboquivari Habitat Management Plan (1980)
- HMP EA AZ-020-0-197 (1980)
- Phoenix Resource Management Plan (1988)
- Master Memorandum Of Understanding between the State of Arizona, Arizona Game and Fish Commission and the Department of the Interior, Bureau of Land Management (2004)
- Interim Management Policy for Bureau of Land Management National Monuments and National Conservation Areas (IM-2002-008) (2002)

Reasons for Finding No Significant Impact

- Both beneficial and adverse effects of the proposed action and alternatives have been considered, (See EA pages 11-15). Mitigation measures have been included to reduce or eliminate any potential adverse impacts. Therefore, the beneficial effects outweigh any potential effects from implementing the proposed action.
- The proposed action is consistent with the applicable Land Use Plan and other environmental documentation.
- No impacts to paleontological, cultural or historic resources would occur from implementation of the proposed action.
- There are no endangered, threatened, proposed or candidate species in the immediate vicinity of the proposed action. Implementation of the proposed action will not affect the desert tortoise, because of mitigation measures, and because no den sites are within the project area.
- Monument resources will be affected temporarily, during the construction phase. However, the long-term result will make the development more compatible with monument resources.
- Public health and safety of the general public are not affected.

- The actions are not precedent setting or unique. The BLM and AGFD have considerable experience with these types of projects and actions, and their effects are not uncertain. Therefore, a unique or unknown risk is not being taken by implementing the proposed action.
- This proposal is consistent with applicable state and federal laws, regulations, and policy (see EA pages 7-8)
- The EA discloses the actions would reduce, and potentially eliminate, the need for regular water supplementation by truck, thereby reducing vehicle activity within the monument. It also discloses that the proposed action would result in a cumulative improvement in visual resources and accessibility to the catchment by desert bighorn sheep and mule deer. There are no adverse cumulative impacts.

There is no substantial controversy over the effects of this proposal. No controversy or significant concerns were identified during public comment or agency reviews

- An opportunity, of 30 days was made available to the public to address concerns and provide comments on the proposed project. The following is a synopsis of the public comments received during this period. and therefore none were disclosed in the EA

Determination:

Based on the information contained in the attached Environmental Assessment, it is my determination that the proposed action is not a major Federal Action and will have no significant effect on the quality of the human environment; therefore, an Environmental Impact Statement is not required.

Shela McFarlin
Field Manager

Date

Public Comments Received From Notice of Proposed Action (NOPA) Inquiry

A Notice of Proposed Action (NOPA) was sent to 11 individuals or groups advising them that a proposal to analyze the proposed action was being considered. Responses were received from 1 individuals or organizations (via FAX), as outlined below.

SUMMARY OF PUBLIC RESPONSES

The Coalition for Sonoran Desert Protection support the proposed action as long as no other wildlife waters are developed or redeveloped inside of the Ironwood Forest National Monument until a comprehensive study has been completed on the state of existing wildlife water developments and the need for any more is determined. They also expressed that BLM must protect wilderness characteristics of certain areas and if those areas contain wildlife waters, they may need to be rehabilitated to eliminate the need to haul water, close the roads to them or eliminate them if they are unnecessary.

Responses to those letters are found below.

SUMMARY OF BLM RESPONSES

The Arizona Game and Fish Department is currently conducting studies relating to the use and value of water sources to wildlife in the Sonoran desert. Their research, which includes collecting data on water quality, and the construction of temporary water sources for wildlife, is expected to take several years to complete. However, the Arizona Game and Fish Department is responsible for managing Arizona's wildlife populations, and the Bureau of Land Management coordinates and cooperates with the Department on these activities.

INTRODUCTION

The West Silver Bell Mountains Catchment #3 (T.11S. R.7E. SEC. 21 NE ¼ NE ¼, N 32° 27.621', W 111° 38.562'), located in the Ironwood Forest National Monument (IFNM), is a wildlife water development originally constructed by the Arizona Game and Fish Department (AGFD) in March 1983 (see map, Appendix 1). AGFD has assigned development number 880 to this specific wildlife habitat improvement. The catchment is located on an alluvial fan in the West Silver Bell Mountains, approximately 42 miles northwest of Tucson, and is accessible by vehicles with adequate ground clearance. The existing catchment components include a 2,800 square-foot rain-gathering apron made of coated fiberglass cloth, along with a shallow metal tank and vinyl liner set into the ground for water storage, holding approximately 7,300 gallons of water. The storage tank is covered by a wooden-frame roof, with corrugated metal panels nailed to it, and set on the surrounding ground. Water from the storage tank is conveyed to a small, float-regulated drinking trough via approximately 125 feet of buried, metal pipeline. The catchment is surrounded by approximately 1,350 feet of four-strand wire fence, intended to exclude livestock.

The Federal Land and Policy Management Act of 1976 (FLPMA), directs the Bureau of Land Management (BLM) to manage Public Lands for the purpose of multiple use and sustained yield. The management of wildlife habitat and wildlife management are two such uses covered under the Act. The AGFD and the BLM in Arizona cooperate through a Memorandum of Understanding (MOU) to accomplish these mandates. Under this MOU, the BLM recognizes that AGFD manages the wildlife in the State of Arizona. Both agencies work cooperatively to manage and improve the wildlife resources and their habitat. Additional guidance is provided in the Interim Management Policy for BLM National Monuments and National Conservation Areas (IMP), which states that maintenance of existing facilities should be permitted, subject to compliance with current policies and practices, provided monument resources are protected.

This Environmental Assessment (EA) will evaluate the impacts of the proposed action and alternatives regarding the redevelopment of catchment #880. If completed, the redeveloped catchment should continue to provide resident wildlife populations with a more self-sufficient, less visible water source, and reduce the need for vehicle use within the monument for water hauling, maintenance and inspection purposes.

Purpose and Need for the Proposed Action

The AGFD has identified catchment #880 as requiring repairs, as well as requiring water supplementations by truck during the summer months. As a result, an evaluation of the catchment was conducted to compare its original components and historical performance to current AGFD construction standards. This evaluation determined the catchment continues to be used by a variety of big game and other wildlife, most frequently by mule deer. The original primary intent of the catchment also remains relevant, that being to improve the habitat available to desert bighorn sheep in the general area. This catchment could be made significantly more reliable and less visible by replacing the aging components with more modern materials. Specifically, the appearance of the large, fiberglass apron and metal tank roof could be greatly reduced by replacing their functions with a small dam to gather run-off water, and a set of new water storage tanks buried out of sight and holding a greater volume of water than the original tank.

In addition, the current components of the catchment include a float valve to regulate water flow to the drinking trough, which can be problematic due to the potential to malfunction and either provide no water at all, or to remain open and completely drain the system. Lastly, it was noted that a standard, four-strand wire fence was in place to exclude livestock from the catchment, which is intended to provide water primarily for desert bighorn sheep and mule deer. Because this fence design is not optimal for access by bighorn sheep, replacement with a standard, three-rail metal pipe fence would increase overall accessibility and safety for wildlife, and especially bighorn sheep, while essentially eliminating the need for routine fence maintenance.

If authorized, redevelopment activities last approximately one week, and would most likely occur between March and May 2005. AGFD personnel and volunteers from the Arizona Desert Bighorn Sheep Society and other groups are anticipated to perform all construction activities.

Conformance with Land Use Plans

Redevelopment of an existing water catchment to provide dependable and accessible water for wildlife conforms to the Phoenix Resource Management Plan.

Relationships to Statutes, Regulations and Other Plans

The actions considered in this document are consistent with the Interim Management Policy for Bureau of Land Management National Monuments and National Conservation Areas (IM-2002-008). The original BLM Environmental Assessment authorizing the construction of the catchment was completed in 1980 (EA #AZ020-0-197). A Monument Management Plan for the IFNM is being developed, but is not yet in effect.

The BLM Management Framework Plan for the Silver Bell – Baboquivari Planning Unit (1976) included the objective and decision to construct water catchments where needed, along with the instruction to develop and implement a Habitat Management Plan for the area in cooperation with AGFD. The Silver Bell – Baboquivari Habitat Management Plan (HMP) (1980) more specifically addressed wildlife issues, including planned actions to construct five additional wildlife water catchments, improve five others, and remove or modify fences conflicting with deer and bighorn sheep use of habitat. Wildlife issues within the IFNM were not specifically addressed in the Silver Bell – Baboquivari HMP, as it preceded monument designation.

Maintenance of existing wildlife water catchments, including water-hauling, is authorized under the Interim

Management Policy for monuments. This includes the replacement of existing water catchment components if necessary to maintain the function of a given catchment, and if there will be no significant net change to the site.

Construction and maintenance of water developments are consistent with the AGFD mission statement, directly tied to their Wildlife 2006 strategic plan, and is an approved use of Federal Aid funds as outlined in their project narrative and annual job statement. BLM and AGFD cooperate under a Master Memorandum of Understanding.

PROPOSED ACTION AND ALTERNATIVES

Proposed Action

The AGFD, in cooperation with the BLM, proposes to redevelop West Silver Bell Mountains Catchment #3 (T.11S. R.7E. SEC. 21 NE ¼ NE ¼, N 32° 27.621', W 111° 38.562'), an existing wildlife water development in the Ironwood Forest National Monument. This action would increase the catchment's water storage capacity and water gathering ability, improve the overall reliability, reduce water losses to evaporation, reduce the visual appearance of the catchment, and increase the accessibility for bighorn sheep. The proposed action includes replacing the existing catchment components with 2 buried water storage tanks near the existing drinking trough, a new walk-in type drinking trough set at ground level, and a low-profile, camouflaged, water collection dam. The new, buried tanks would each be approximately 5 feet in diameter and 27 feet long. Combined with the new trough, these components would increase the storage capacity to approximately 11,000 gallons. The water collection dam would consist of a concrete curb approximately 1 foot high and 6 feet wide, set down inside a natural drainage, and tinted to blend in with the surrounding rock. Approximately 200 feet of pipeline would be buried between the collection dam and the water storage tanks. Estimated total ground disturbance will be about 1/10 ths of an acre of mostly previously disturbed ground.

The new catchment components would be positioned within the existing enclosure fence as depicted in Appendix 2. The existing wire fence would be replaced with a three-rail pipe fence, and allowed to oxidize to a natural rust color. The right angles of the existing four fence corners would be realigned to form less noticeable, rounded corners in the fence line. In addition, it will be recommended that in the IFNM transportation plan that the access road leading to the catchment will be gated approximately 0.8 mile south of the catchment to reduce vehicular disturbance to the area. Administrative vehicular access to the site would continue, as necessary.

The following existing components would be removed from the site:

- Fiberglass apron coated with asphalt emulsion
- Galvanized steel water tank and vinyl liner
- Wood and steel apron/roof section over water tank
- Float valve-regulated fiberglass drinking trough
- Four-strand wire fence and metal posts

Disturbed areas will be contoured to blend in with the surrounding area. Disturbance to vegetation will be kept to a minimum. The entire project is estimated to take approximately 8 to 16 days to complete, most likely occurring sometime between March 1st and May 31st, 2005.

Alternatives (Including No Action)

Alternative A

Under this alternative, the new, buried components and water collection dam described in the Proposed

Action would be implemented, however, the existing catchment components would be repaired and maintained to serve as an independent fail-safe for the new components, should the new system go dry for any reason. Both of the current water collection aprons would be removed and replaced with metal aprons of similar dimensions. The existing metal storage tank would be removed and replaced with a fiberglass ring tank of similar dimensions. The existing float-regulated trough would be removed and replaced with a walk-in type trough, set into the ground immediately adjacent to the water storage tank. The existing wire fence would be replaced with a pipe-rail fence, and the access road would be gated, as described in the Proposed Action. Administrative vehicular access to the site would continue, as necessary.

The need for occasional supplemental water via water truck, and for frequent inspections by the AGFD Wildlife Manager, would be eliminated, as describing in the Proposed Action. The water level in one of the two systems on site could be verified by use of aircraft.

Disturbed areas will be contoured to blend in with the surrounding area. Disturbance to vegetation will be kept to a minimum. The entire project is estimated to take approximately 8 to 16 days to complete, mostly likely occurring sometime between March 1st and May 31st, 2004.

Alternative B

Under this alternative, the existing footprint of the existing catchment components would be used to construct a new system using a larger metal apron, a larger storage tank, and a walk-in trough. The existing fiberglass cloth apron and framed tank cover/roof would be removed and replaced with a single, 24' x 120' metal apron. The existing metal storage tank would be removed and replaced with a fiberglass ring tank to store approximately 10,000 gallons of water. The current tank hole would be excavated deeper to accommodate the new, larger fiberglass tank. The existing float-regulated trough would be removed and replaced with a walk-in type trough, set into the ground within next to the water storage tank. The existing wire fence would be replaced with a pipe-rail fence, and the access road would be gated, as described in the Proposed Action. Administrative vehicular access to the site would continue, as necessary.

The need for occasional supplemental water via water truck, and for frequent inspections by the AGFD Wildlife Manager, would be eliminated, as describing in the Proposed Action. The water level in the modified system could be verified by use of aircraft.

Disturbed areas will be contoured to blend in with the surrounding area. Disturbance to vegetation will be kept to a minimum or non-existent. The entire project is estimated to take approximately 8 to 16 days to complete, mostly likely occurring sometime between March 1st and May 31st, 2004.

No Action Alternative

Under the No Action Alternative, AGFD would maintain the existing components of the catchment by repairing or replacing with materials of the same size and function, as allowed under the BLM Interim Management Policy. The fiberglass cloth apron and tank cover/roof would be replaced with camouflaged metal aprons of the same dimensions, being somewhat less visible than the existing apron and roof. The wire fence would be maintained in place, and vehicular access to the site would continue to be unrestricted. The need for occasional supplemental water via water truck would continue primarily during the summer months. The need for frequent inspections by the AGFD Wildlife Manager would continue in order to insure water availability. Such inspections would be accomplished only by pick-up truck, as the water level cannot be monitored from aircraft.

AFFECTED ENVIRONMENT

General Setting and Affected Resources

The West Silver Bell Mountains occur in south central Arizona, approximately 40 miles northwest of Tucson (see map, Appendix 1), and are included within the Ironwood Forest National Monument (IFNM). No incorporated or unincorporated communities are within 10 miles of the catchment site. The area receives an average of 9 to 13 inches of precipitation annually, primarily during the months of July through August, and December through March. Temperatures typically will drop to just below freezing overnight during the winter months, and exceed 110 degrees Fahrenheit during the day in summer.

Two other wildlife water catchments are maintained by AGFD in the vicinity of this catchment. Catchment #676 is located 2.0 miles to the southeast, and catchment #677 is located 2.6 miles to the northwest. Both catchments are functional and supply water to wildlife year around. Various water sources established for livestock by private interests also are in the same vicinity, however these waters are not typically available perennially, especially during periods of drought.

Soils occurring in the area are extremely variable and complex, ranging from sands to clay loam. Common soil types near the catchment include deep, gravelly calcareous soils (Gunsight-Rillito-Harque), and rock outcrop and shallow gravelly soils (Rock Outcrop-Cherioni-Lomitas).

Wildlife occurring in the area include: bighorn sheep, mule deer, coyotes, gray foxes, javelina, Gambel's quail, mourning dove, white-wing dove, various bat species, desert tortoises, Gila monsters, various rattlesnakes, and other non-game species. The plant communities occurring at or near the site is representative of Upper Sonoran Desert Scrub, including palo verde, creosote bush, ironwood, ocotillo, white bursage, mesquite and hackberry. A more complete description of the soils, wildlife, and vegetation in the area and other information can be found in the Silver Bell – Baboquivari HMP (BLM 1980).

ENVIRONMENTAL IMPACTS

The following resources have been analyzed and are either not present or will not be impacted by the Proposed Action or the Alternative Actions.

- 1) Water Quality
- 2) Riparian or Wetland Zones
- 3) Wild and Scenic Rivers
- 4) Hazardous or Solid Wastes
- 5) Prime or Unique Farmland
- 6) Areas of Critical Environmental Concern Designation
- 7) Flood Plains
- 8) Native American Religious Concerns
- 9) Wilderness or Wilderness Study Areas
- 10) Wild Horses or Burros

IMPACTS OF THE PROPOSED ACTION

Monument Resources

Noise and vehicle traffic associated with redevelopment of the catchment may temporarily disrupt some visitors near the site, or along access routes. However, long-term vehicle disturbances would be reduced. This action would essentially eliminate the need for occasional supplemental water via water truck. Similarly, the need for frequent inspections by the AGFD Wildlife Manager, would be greatly decreased, because the water in the new system would rarely decline to a critical level, which requires more frequent monitoring. Such inspections are currently accomplished via a pick-up truck, as the water level in the storage tank is not visible, and cannot be monitored from an over-flying aircraft. Under this action, the water level in the new system is visible and at equilibrium with the walk-in trough, and can therefore be monitored from the air, should the opportunity to do so arise.

Visual Resources

Most man-made structures within the monument affect the visual resource in some manner. Visual resources will be primarily affected over the short term, during the construction phase due to the presence of people and vehicles. To the greatest extent practicable, the catchment components will be made as inconspicuous as possible, by burial and by using various camouflage techniques as described in the Proposed Action. Overall, visual resources will be greatly improved from the current condition, as the Proposed Action includes the removal of structures currently most visible. No new roads will be constructed as a result of this project.

Soils

A minimal amount of soil disturbance will occur while working at and around the site, and while staging the materials and equipment. New surface disturbance will be restricted to a very small area to facilitate burial of the new water storage tanks and the new pipeline to the water collection dam. New surface disturbance is anticipated to be one-tenth of an acre or less. The surface area reclaimed, recontoured and harrowed following removal of the existing apron and tank is also anticipated to be approximately one-tenth of an acre.

Air Quality

A minimal amount of dust is anticipated as a result of the small-scale digging, burial and recontouring activities with construction equipment. If necessary, the work area will be sprayed with water to reduce blowing dust.

Wildlife

Wildlife use within the area will remain the same because no change is occurring regarding the presence and availability of water at this location. Increased human activity and noise associated with redevelopment activities could have a temporary negative impact, as wildlife will likely leave the immediate project area during the redevelopment activities. Impacts to wildlife are considered to be temporary, lasting the duration of the project, approximately 8 to 16 days. Over the long term, disturbance to wildlife by humans will decrease since activities associated with filling the catchment via truck will be reduced or eliminated, and because the general public will no longer be able to directly access the catchment with vehicles. The proposed redevelopment activities will occur during the cooler, non-critical time of the year, so as to not deprive wildlife of water. Access to the catchment by bighorn sheep will be safer, following the elimination of wire fencing, which can present an entanglement hazard. The catchment occurs within BLM Category 2 desert tortoise habitat. Redevelopment of the catchment will not affect the desert tortoise because no net losses will occur of suitable desert tortoise habitat, and no den sites occur within the

immediate project area. If observed within the project area, desert tortoises will be moved a safe distance away (according to AGFD protocol) and released unharmed. When feasible, other wildlife (e.g. invertebrates, small mammals and reptiles etc.) encountered within the construction zone will be moved out of harm's way, likely less than 100 yards from the project site.

Threatened and Endangered species

No federally threatened, endangered, proposed or candidate species are known to inhabit in the area. Recent surveys near the catchment for Cactus Ferruginous Pygmy Owls were negative. (Pers. Comm. S. Richardson) Given the small project area and no net loss of habitat, the potential to affect this species or its suitable habitat is considered to be so unlikely as to be discountable.

Botanical Resources

Some plants may be intentionally removed, trimmed or accidentally crushed during construction activities. Reasonable attempts will be made to minimize these impacts, particularly to species protected by the Arizona Native Plant Statues, Category A, "Highly Safeguarded Protected Native Plants". Individual plants in good condition and in harm's way may be transplanted on-site.

Invasive species

No soil, plants, animals, or other living organism will be knowingly transported to the project site. Machinery and equipment will be inspected for residual soil or vegetation (or life stages thereof) and removed if present, before being transported to the project. Water used to fill the catchment will be potable or otherwise originating from well sources.

Cultural/Paleontological Resources

A cultural clearance of the catchment location by the BLM in 1982 did not reveal evidence of cultural resources.

Recreation

Approximately 8 tenths of a mile of an existing unimproved access road that ends at the catchment would be closed to vehicle use by the public. No other impacts to recreation are anticipated.

Land Tenure

The proposed project falls within a large, contiguous block of public lands. No private lands would be affected and no acquisition or disposal of public lands would be required.

Minerals

Monuments are withdrawn from mineral entry, but subject to valid existing rights. There are no mining claims in the vicinity of the project. No minerals or saleable materials are known to be present at the development site, and, therefore, there will be no impacts to minerals resources.

Rangeland Resources

The project site is located within the Tejon Pass grazing allotment. Because the project site is not accessible to cattle due to protective fencing, no impact to the grazing allotment is anticipated.

Energy

The proposed action will not have direct or indirect adverse impacts on energy development, production, supply and/or distribution.

Environmental Justice

As described in Executive Order (EO) 12898, the proposed action will have no effect on environmental justice.

Water Rights Water Rights will be filed for once the project is completed and the final capacity of the system is determined.

Watershed Impacts

The catching and storing of 11,000 of storm runoff will not have any impact on the watershed as the drainage will produce much more runoff during a normal flow event.

IMPACTS OF ALTERNATIVE A

Visual Resources

Most man-made structures within the monument affect the visual resource in some manner. Visual resources will be primarily affected over the short term, during the construction phase due to the presence of people and vehicles. To the greatest extent practicable, the catchment components will be made as inconspicuous as possible, by burial and by using various camouflage techniques as described in this alternative. Overall, visual resources will be somewhat improved from the current condition, as the structures currently most visible will be camouflaged. No new roads will be constructed as a result of this alternative.

Soils

A minimal amount of soil disturbance will occur while working at and around the site, and while staging the materials and equipment. New surface disturbance will be restricted to a very small area to facilitate burial of the new water storage tanks and the new pipeline to the water collection dam. New surface disturbance is anticipated to be one-tenth of an acre or less, and will be harrowed to a 4" depth.

IMPACTS OF ALTERNATIVE B

Visual Resources

Most man-made structures within the monument affect the visual resource in some manner. Visual resources will be primarily affected over the short term, during the construction phase due to the presence of people and vehicles. To the greatest extent practicable, the catchment components will be made as inconspicuous as possible, by using various camouflage techniques on the new apron. Overall, visual resources would be somewhat improved from the current condition. No new roads will be constructed as a result of this project.

Soils

A minimal amount of soil disturbance will occur while working at and around the site, and while staging the materials and equipment. No new surface disturbance is anticipated to be necessary beyond the original construction footprint of the existing components. No areas would require recontouring or harrowing.

IMPACTS COMMON TO ALTERNATIVES A AND B

Monument Resources

Under Alternatives A and B, impacts to Monument resources will be the same as the Proposed Action.

Air Quality

A minimal amount of dust is anticipated as a result of the small-scale digging, burial and recontouring activities with construction equipment. If necessary, the work area will be sprayed with water to reduce blowing dust.

Wildlife

Wildlife use within the area will remain the same because no change is occurring regarding the presence and availability of water at this location. Increased human activity and noise associated with redevelopment activities could have a temporary negative impact, as wildlife will likely leave the immediate project area during the redevelopment activities. Impacts to wildlife are considered to be temporary, lasting the duration of the project, approximately 8 to 16 days. Over the long term, disturbance to wildlife by humans will decrease since activities associated with filling the catchment via truck will be reduced or eliminated, and because the general public will no longer be able to directly access the catchment with vehicles. The proposed redevelopment activities will occur during the cooler, non-critical time of the year, so as to not deprive wildlife of water. Access to the catchment by bighorn sheep will be safer, following the elimination of wire fencing, which can present an entanglement hazard.

No federally threatened, endangered, proposed or candidate species are known to inhabit in the area. Recent surveys near the catchment for Cactus Ferruginous Pygmy Owls were negative. Given the small project area and no net loss of habitat, the potential to affect this species or its suitable habitat is considered to be so unlikely as to be discountable. The catchment occurs within BLM Category 2 desert tortoise habitat. Redevelopment of the catchment will not affect the desert tortoise because no net losses will occur of suitable desert tortoise habitat, and no den sites occur within the immediate project area. If observed within the project area, desert tortoises will be moved a safe distance away (according to AGFD protocol) and released unharmed. When feasible, other wildlife (e.g. invertebrates, small mammals and reptiles etc.) encountered within the construction zone will be moved out of harm's way, likely less than 100 yards from the project site.

Botanical Resources

Some plants may be intentionally removed, trimmed or accidentally crushed during construction activities. Reasonable attempts will be made to minimize these impacts, particularly to species protected by the Arizona Native Plant Statues, Category A, "Highly Safeguarded Protected Native Plants". Individual plants in good condition and in harm's way may be transplanted on-site.

Invasive species

No soil, plants, animals, or other living organism will be knowingly transported to the project site. Machinery and equipment will be inspected for residual soil or vegetation (or life stages thereof) and removed if present, before being transported to the project. Water used to fill the catchment will be potable or otherwise originating from well sources.

Cultural/Paleontological Resources

A cultural clearance of the catchment location by the BLM in 1982 did not reveal evidence of cultural resources.

Recreation

Approximately 8 tenths of a mile of an existing unimproved access road that ends at the catchment would be closed to vehicle use by the public. No other impacts to recreation are anticipated.

Land Tenure

The proposed project falls within a large, contiguous block of public lands. No private lands would be affected and no acquisition or disposal of public lands would be required.

Minerals

Monuments are withdrawn from mineral entry, but subject to valid existing rights. No minerals or saleable materials are known to be present at the development site, and, therefore, there will be no impacts to minerals resources.

Rangeland Resources

The project site is located within the Tejon Pass grazing allotment. Because the project site is not accessible to cattle, no impact to the grazing allotment is anticipated.

Energy

The proposed action will not have direct or indirect adverse impacts on energy development, production, supply and/or distribution.

Environmental Justice

As described in Executive Order (EO) 12898, the proposed action will have no effect on environmental justice

Water Rights Water Rights will be filed for once the project is completed and the final capacity of the system is determined.

Watershed Impacts

The catching and storing of 11,000 of storm runoff will not have any impact on the watershed as the drainage will produce much more runoff during a normal flow event.

IMPACTS OF THE NO ACTION ALTERNATIVE

Monument Resources

Noise and vehicle traffic associated with normal maintenance and repair of the catchment may temporarily disrupt some visitors near the site, or along access routes. Long-term vehicle disturbances associated with water hauling and inspections will continue at approximately the same rate.

Visual Resources

Most man-made structures within the monument affect the visual resource in some manner. Visual resources will be primarily affected over the short term, during the construction phase due to the presence

of people and vehicles. Overall, visual resources may be slightly improved from the current condition, as the existing aprons are repaired and replaced with camouflaged metal panels. No new roads will be constructed as a result of this project.

Soils

No new soil disturbance would occur while maintaining or repairing the catchment.

Air Quality

No noticeable dust is anticipated as a result of maintenance or repair activities.

Wildlife

Wildlife use within the area will remain the same because no change would occur regarding the presence and availability of water at this location. Increased human activity and noise associated with maintenance or repair activities could have a temporary negative impact, as wildlife will likely leave the immediate project area during these activities. Such impacts to wildlife would be temporary, lasting the duration of the particular activity, up to approximately 16 days. Over the long term, disturbance to wildlife by humans will remain the same since activities associated with filling the catchment via truck will be unchanged, and because the general public will continue to directly access the catchment with vehicles. Access to the catchment by bighorn sheep will not be safer, given the continued presence of wire fencing, which can present an entanglement hazard.

No federally threatened, endangered, proposed or candidate species are known to inhabit in the area. Recent surveys near the catchment for Cactus Ferruginous Pygmy Owls were negative. Given the small project area and no net loss of habitat, the potential to affect this species or its suitable habitat is considered to be so unlikely as to be discountable. The catchment occurs within BLM Category 2 desert tortoise habitat. Maintenance or repair of the catchment will not affect the desert tortoise because no losses will occur of suitable desert tortoise habitat, and no den sites occur within the immediate catchment area. If observed and potentially within harm's way, desert tortoises will be moved a safe distance away (according to AGFD protocol) and released unharmed. When feasible, other wildlife (e.g. invertebrates, small mammals and reptiles etc.) encountered within the catchment area will be moved out of harm's way, likely less than 100 yards from the project site.

Botanical Resources

Some plants may be intentionally removed, trimmed or accidentally crushed during maintenance or repairs activities. Reasonable attempts will be made to minimize these impacts, particularly to species protected by the Arizona Native Plant Statues, Category A, "Highly Safeguarded Protected Native Plants". Individual plants in good condition and in harm's way may be transplanted on-site.

Invasive species

No soil, plants, animals, or other living organism will be knowingly transported to the project site. Machinery and equipment will be inspected for residual soil or vegetation (or life stages thereof) and removed if present, before being transported to the project. Water used to fill the catchment will be potable or otherwise originating from well sources.

Cultural/Paleontological Resources

A cultural clearance of the catchment location by the BLM in 1982 did not reveal evidence of cultural resources.

Recreation

No impacts to recreation are anticipated.

Land Tenure

The catchments fall within a large, contiguous block of public lands. No private lands would be affected and no acquisition or disposal of public lands would be required.

Minerals

Monuments are withdrawn from mineral entry, but subject to valid existing rights. No minerals or saleable materials are known to be present at the catchment site, and, therefore, there will be no impacts to minerals resources.

Rangeland Resources

The project site is located within the Tejon Pass grazing allotment. Because the catchment site is not accessible to cattle, no impact to the grazing allotment is anticipated.

Energy

Maintenance or repair activities will not have direct or indirect adverse impacts on energy development, production, supply and/or distribution.

Environmental Justice

As described in Executive Order (EO) 12898, the maintenance or repair activities will have no effect on environmental justice.

RESIDUAL IMPACTS

Residual impacts resulting from the Proposed Action include the presence of a low profile water collection dam and a slightly larger drinking trough. However, the residual impacts also include a net decrease in above-ground, visible structures, given the removal of the existing aprons and water storage tank.

CUMULATIVE IMPACTS

Given the past and current presence of water and inspection activities at this location, no cumulative impacts are anticipated.

MITIGATION MEASURES

1. All camping associated with the project will occur within 100 feet of established roads and trails, within a general area identified by BLM personnel. All project participants will follow common "leave no trace" camping ethics regarding garbage, human waste disposal and the removal of vehicle tracks.
2. Firewood will not be taken from the monument, but will be brought in from outside. All fire rings will be scattered following disbandment of camping activities. Any extra campfire wood will be removed from the monument.

3. All old water development components and construction debris will be promptly removed from the area and disposed of properly. Any soil or rock excavated during redevelopment of the catchment will be used for backfill or spread in the immediate vicinity. Disturbed areas will be contoured to blend in with the surrounding area.
4. Disturbance to native vegetation will be kept to a minimum and in accordance with the Arizona Native Plant statutes. Where practical, native vegetation will be replanted in disturbed areas to enhance natural revegetation, and the remaining disturbed areas will be harrowed to approximately a 4" depth to prevent erosion and promote natural vegetation regeneration by seed.
5. Aboveground structures will be camouflaged (e.g. painted/tinted or covered with native rocks, concrete, organic debris, or soil) to make them as unobtrusive as possible. The pipe-rail fence will be allowed to rust naturally, and right angle corners in the fence line will be rounded to further blend in with the natural features.
6. If desert tortoises are encountered within the project area, workers will follow AGFD protocol to move them from the project site and out of harm's way.
7. Should any archaeological artifacts be found during the redevelopment, the Tucson Field Office archaeologist will be notified immediately. All work will cease until an evaluation of the discovery is made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values.

CONSULTATION AND COORDINATION

Persons and Agencies Consulted

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Appendix 1, Project Location Map

Appendix 2, Site Diagram for the Proposed Action